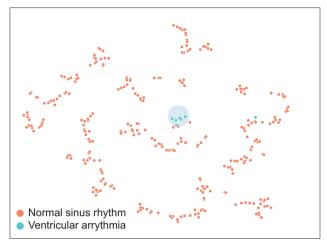# HIR
Healthcare Informatics Research

Figure S1. Result of t–distributed stochastic neighbor embedding (t-SNE) between normal sinus features and ventricular arrhythmia features. To confirm that convolutional autoencoder (CAE) features represent more various types of electrocardiogram (ECG) rhythms not included in the Shaoxing dataset, an additional experiment was conducted with ventricular arrhythmia, which is a critical and urgent ECG rhythm. We conducted t-SNE clustering with a ventricular arrhythmia not included in the Shaoxing dataset and a normal sinus rhythm. Figure S1 shows the result of clustering in which ventricular arrhythmia features had their own group. The results show that CAE can capture the characteristics of ventricular arrhythmias. Because the feature extraction model learned over 2 million ECG data samples that naturally occurred in the intensive care unit, it can be expected that more various types of ECGs are represented in CAE features.